Illinois Commerce Commission Report to the General Assembly: Experimental Programs Initiated by Electric Utilities Under Section 16-106 of the Electric Service Customer Choice and Rate Relief Law of 1997 During 2001

The Illinois Commerce Commission

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Executive Summary

The Illinois Commerce Commission ("Commission") submits its fourth annual Report to the General Assembly regarding the experimental programs implemented by electric utilities pursuant to Section 16-106 of the Electric Service Customer Choice and Rate Relief Law of 1997, 220 ILCS 5/16-106 ("Customer Choice Law"). This report is submitted in response to the directive in Section 16-106 that the Commission "review and report annually the progress, participation and effects of such experiments to the General Assembly."

Electric utilities have operated a total of eighteen experimental programs since the Customer Choice Law was enacted in December 1997. Ten programs were in effect during 2001. AmerenCIPS operated one experimental program; AmerenUE operated two programs; ComEd operated six programs; and, Illinois Power operated one program. Four of the 2001 programs were load curtailment programs; however, none of the utilities sought curtailment under these programs during 2001. Summary information about the experimental programs that were in effect in 2001 is provided below (see Table 1).

The Commission has concluded the following about the programs implemented under Section 16-106 during 1997-2001:

- Utilities have operated two general types of experimental programs. First, electric utilities have offered programs to specific, narrowly defined customer groups. AmerenUE is currently operating a program of this type, which is available to low-income customers in the Metro East area. This program terminated in 2001. ComEd has operated several programs that were available only to certain customer groups, but is currently operating only one of these programs.

  The second general type of experimental program implemented by electric utilities concerns measures to address reliability issues. The Ameren companies (AmerenCIPS and AmerenUE), ComEd and Illinois Power have operated several programs of this kind. ComEd's current programs related to reliability include a program that encourages customers to curtail their usage during periods of heavy demand and a program that rewards customers who have the ability to relieve stress on ComEd's transmission and distribution system through the use of self-generation.

- The expenditures by ComEd on Section 16-106 programs have been significant. During 2001, ComEd's expenditures on its Section 16-106 programs, including payments to customers in the form of discounted rates and other participation inducements, were approximately $9 million. ComEd spent approximately $130 million during 1997-2001 on its Section 16-106 programs.

- There should be no direct impact of the experimental programs on the rates of customers not participating in the programs because the Commission is required to exclude the costs and revenues associated with Section 16-106 programs when setting electric rates.

- The Commission believes that the value of the information obtained from some of the programs obtained is lower than the costs associated with those programs.

- Customers in retail businesses who do not obtain the discounts associated with some of the experimental programs could face a slight competitive disadvantage relative to the customers who receive the discounts; this advantage will persist until December 31, 2006, the date at which utilities may no longer impose transition charges on customers who take delivery services.

- The companies that have implemented Section 16-106 programs could have submitted these programs to the Commission for approval, which would have permitted the Commission to review and comment on the programs prior to their implementation.

- As a consequence of the Commission's adoption of 83 Ill. Adm. Code Part 452 "(Standards of Conduct and Functional Separation"), as a general practice, pricing billing and experiments under which power and energy is offered for sale can no longer be offered under Section 16-106 by an electric utility choosing to organize itself as an "Integrated Distribution Company". In response to the adoption of 83 Ill. Adm. Code Part 452, ComEd has terminated some of its experimental programs.

  Load curtailment programs are an example of programs that involve the sale of power and energy. However, since Part 452 permits electric utilities to offer experimental programs under tariffs approved by the Commission, experimental load curtailment programs and other programs that involve the sale of power may continue.

Table 1 provides general information about the Section 16-106 programs that electric utilities operated during 2001:

Table 1: 2001 Experimental Programs Operated by Electric Utilities Under Section 16-106 of the Public Utilities Act

Name of Program	Electric Utility	Eligible Customers	Participation Levels and Program Results
Voluntary Curtailment Billing Experiment	Ameren Companies	Nonresidential customers	No general curtailments were called.
Pay As You Go Billing Program	AmerenUE	Low-income customers in the East St. Louis Metro area	100 LIHEAP customers selected for program
2001 Load Curtailment Pricing Experiment	ComEd	Nonresidential customers who could commit to curtail load when requested.	3,777 customers committed to curtail 809 MW. No general curtailments were called.
Enhanced Distribution Billing and Pricing Experiment	ComEd	Customers demonstrating a need for enhanced distribution services	No customers participated.
High Density Electrical Load Commercial Installation Pricing Experiment	ComEd	Nonresidential customers requesting service for very high electrical load density requirements	One customer participated.
Low Consumption Communication Network Device Billing and Pricing Experiment	ComEd	Customers with at least 25 low consumption level communication devices	One customer participated.
Student Power 2000 Pricing Experiment	ComEd	Public and private grade schools in ComEd service area	Over 1,500 grade K-12 schools participated during the program.
Wind and Photovoltaic Generation Pricing Experiment	ComEd	Retail customers who own and operate small (up to 40 kW) wind or photovoltaic generators	19 customers participated in the program during 2001.
Consolidated Billing Experiment	ComEd	Retail businesses and schools	181 multi-site premises and 204 school district sites participated.

Table 1: (Continued): 2001 Experimental Programs Operated by Electric Utilities Under Section 16-106 of the Public Utilities Act

Name of Program	Electric Utility	Eligible Customers	Participation Levels and Program Results
Reliability and Restoration Pricing Experiment	ComEd	Customers whose electric service was interrupted for periods of specified duration.	Payments to 17,735 customers as a result of service interruptions.
Dispatchable Back-Up Generation and Distribution Reliability Pricing Experiment	ComEd	Customers served by designated distribution feeders who could install generating equipment	Three customers participated in the program. ComEd deferred $1.8 million in transmission and distribution work for one year.
Load Reduction Experiment	Illinois Power	Non-residential customers.	No general curtailments were called during 2000-2001.

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I. Introduction

The "Electric Service Customer Choice and Rate Relief Law of 1997" ("Customer Choice Law"), enacted into law on December 17, 1997, made a number of significant changes to the Public Utilities Act ("Act"). Among the changes is new Section 16-106, which permits electric utilities to offer experimental programs at their discretion to a selected group of customers. According to Section 16-106, the programs offered under this section of the Act may include experiments for the "provision or billing of services on a consolidated or aggregated basis, as well as other experimental programs."

Section 16-106 requires the Commission to report annually to the General Assembly describing the Commission's evaluation of the "progress, participation and effects" of these programs. This is the Commission's fourth report to the General Assembly concerning Section 16-106 programs.

To date, four electric utilities, AmerenCIPS, AmerenUE, ComEd, and Illinois Power Company, have undertaken experimental programs filed with the Commission pursuant to Section 16-106. AmerenCIPS has operated one program, AmerenUE has operated two programs and Illinois Power has operated three programs. ComEd has operated a total of 14 programs. Only ComEd initiated new programs during 2001. Some of the 14 programs that ComEd initiated under Section 16-106 since 1997 have expired or been terminated by ComEd. Only the programs that were in effect during 2001 are described in this report.[1]

ComEd has offered a mixture of experimental programs. Some of ComEd's fourteen experimental programs were designed for narrowly defined groups, such as retail businesses and schools. Other programs have been aimed at enhancing the reliability of ComEd's utility service, through, for example, voluntary load curtailment. Overall, several thousand ComEd customers have participated in ComEd's experimental programs and have realized over one hundred million dollars in savings from their participation in ComEd's programs.

The Ameren companies in 1999 and Illinois Power have operated load curtailment programs that are similar to the load curtailment programs that have been operated by ComEd. Additionally, AmerenUE operated a second program, the "Pay As You Go Program," which was designed to evaluate low-income customers' response to an innovative bill payment arrangement option.

[1] Programs that have expired have been described in the Commission's previous reports to the General Assembly. These reports are available on the ICC web site at: http://www.icc.state.il.us/ec/electricity.aspx.

As required by Section 16-106, the companies offering experimental programs filed notices with the Commission containing statements describing their programs. The notices generally included the following information: effective program dates; program availability; general program purpose and objectives; and, participation incentives (e.g., rate discounts), if any. The letters sent to the Commission accompanying each notice typically reflected the Companies' interpretation of Section 16-106 that an experimental program becomes effective upon the filing of a notice with the Commission.

The balance of this Report describes in more detail the ten programs filed under Section 16-106 that were in effect during 2001. As required by Section 16-106, the Report also describes the Commission's assessment of the "progress, participation and effects" of each of the programs. After each program description, a table is presented showing summary information about the program. In the Conclusion of the Report, the Commission offers general comments about issues related to Section 16-106 experimental programs. The Appendix to the Report contains a listing of each of the Section 16-106 programs that electric utilities implemented during 1997-2001.

II. Section 16-106 of the Public Utilities Act

The authority provided electric utilities to offer certain types of experimental programs is stated in Section 16-106 as follows:

> Sec. 16-106. Billing experiments. During the mandatory transition period,[2] an electric utility may **at its discretion** conduct one or more experiments…. (Emphasis supplied)

Section 16-106 states that electric utilities may choose which customers are eligible for billing experiments (and, of course, which are not eligible), and that the Commission should allow the experiments to proceed: [3]

> The offering of such a program by an electric utility to retail customers participating in the program, and the participation by those customers in the program, shall not create any right in any other retail customer or group of customers to participate in the same or a similar program. The Commission shall allow such experiments to go into effect upon the filing by the electric utility of a statement describing the program…

Section 16-106 makes clear, however, that the Commission retains its authority to approve experimental programs submitted to the Commission for approval under Sections of the Act other than Section 16-106:[4]

> Nothing contained in this Section shall be deemed to prohibit the electric utility from offering, or the Commission from approving, experimental rates, tariffs and services in addition to those allowed under this Section.

It thus appears that one effect of Section 16-106 is to provide electric utilities that desire to implement experimental programs with a choice. Utilities may either (1) submit the program to the Commission for approval in the traditional manner; or, (2) implement a qualifying program as a billing experiment pursuant to Section 16-106.

Section 16-106 lists the types of billing experiments that may be offered by electric utilities. The experiments may include those

[2]The "mandatory transition period" will end on January 1, 2007.
[3] The Commission has not undertaken any formal investigation to determine whether any of the experimental programs are consistent with Section 16-106.
[4] No experimental programs have been brought by electric utilities to the Commission for approval since the enactment of the Customer Choice Law.

> …for the provision or billing of services on a consolidated or aggregated basis, for the provision of real-time pricing, or other billing or pricing experiments, and may include experimental programs offered to groups of retail customers possessing common attributes as defined by the electric utility, such as the members of an organization that was established to serve a well-defined industry group, companies having multiple sites, or closely-located or affiliated buildings, provided that such groups exist for a purpose other than obtaining energy services and have been in existence for at least 10 years.

The Commission must inform the General Assembly about the experiments filed under Section 16-106:

> The Commission shall review and report annually the progress, participation and effects of such experiments to the General Assembly. Based upon its review, recommendations for modification of such experiments may be made by the Commission to the Illinois General Assembly.

III. Section 16-106 Programs Operated by AmerenCIPS and AmerenUE During 2001

A. Pay As You Go Program

1. Program Summary

In January 1999, the Department of Commerce and Community Affairs ("DCCA") solicited proposals for energy-related projects. AmerenUE submitted a proposal for the "Pay As You Go Program," which was accepted by DCCA.

On September 10, 1999, AmerenUE filed a notice with the Commission describing its intention to implement the Pay As You Go Program. This program is designed to assist low-income customers in achieving a balance between their energy usage and the funds available to pay for that usage. AmerenUE described the experimental program as a billing program.

AmerenUE stated in its notice that low-income customers, after consuming electricity during one month, often struggle to pay their energy bills during the following month. Customers who cannot pay their bills then become subject to late fees, security deposits, and other charges that are not directly related to their electricity consumption. The goal of the Pay As You Go Program is to allow low-income customers the means to pay for their electricity usage as they consume the electricity. This is accomplished by the use of a pre-paid energy card, which is similar to a pre-paid phone card that enables customers to determine the amount of energy that is available for consumption. The use of the Pay As You Go plan will be supplemented by case management from the Urban League of Metropolitan St. Louis, Inc., which will provide home visits, energy assistance support, budgetary education and information about energy conservation methods.

The Urban League selected the one hundred program participants, who must be eligible for the Low-Income Home Energy Assistance Program ("LIHEAP").

AmerenUE stated that, after the participating customers are identified, AmerenUE will install a home display device in each customer's residence. The device is capable of showing six pieces of information: (1) the amount of dollars remaining; (2) the cost of energy being used at that moment; (3) the dollar amount of energy used during the 24 hours prior to 12:00 a.m. of the day the display is accessed; (4) the cost of energy used during the past 30 days; (5) the dollar amount of the most recent card entered into the device; and, (6) the cost per kWh of energy purchased. AmerenUE stated that the word "buy" will flash when the device calculates that there is less than four days of usage available.

The pre-paid cards can be purchased at a "pay station" (a machine that is similar to an ATM) located in Fairview Heights, Illinois, that is accessible 24 hours a day. The pay station accepts checks, money orders and cash.

During the period between November 1 and March 31, the pre-paid cards will allow a customer to consume a limited amount of energy that exceeds the amount for which the customer has paid. The card tracks the amount of energy used. Customers paid the costs for any energy at the first transaction after March 31.

AmerenUE stated that several benefits are available for participating customers. Perhaps the primary benefit is that all or part of old debts will be forgiven. Specifically, for each six months that a customer participates in the program, 25% of the customer's past debts will be forgiven. A customer who remains in the program for the program's two-year duration will have 100% of its past debts forgiven by AmerenUE. Through their participation, it is hoped, customers should become more aware of their energy usage and the importance of budgeting for energy consumption, as well as for other expenses.

AmerenUE stated that the program might result in benefits for energy assistance agencies. AmerenUE anticipates that a successful program will free up money for additional clients that otherwise might have been spent on costs that do not provide a direct kWh benefit for customers.

2. Program Participation, Progress and Effects

Program participation reached 66 PAYGO installations. However, some participants moved out of the program geographical area, so have dropped over time. Customers who remained with the program have had 25% of their bill arrearages forgiven for each six months that they were enrolled in the program.

The program terminated in September 2001.

Table 2: Pay As You Go Program

PAY AS YOU GO PROGRAM (AMERENUE)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Billing program began September 1999. The program has an expected two-year duration.	To evaluate customers' acceptance of a "pay as you go" payment option. The program will also evaluate the "pay as you go" plan as a customer choice for energy conservation, budgeting, and personal responsibility.	One hundred LIHEAP-eligible customers in the East St. Louis Metro area. Customers receive 25% arrearage reduction for every six months of program participation.	Program began September 1999. Total budgeted expenditures are $257, 833. A total of 66 customers have participated in the program; participation levels have dropped over time.

B. Voluntary Curtailment Billing Experiment (AmerenCIPS/AmerenUE)

1. Program Summary

In 1999, AmerenCIPS and AmerenUE filed statements with the Commission describing the Companies' intention to implement "Voluntary Curtailment Billing Experiments."

Ameren's filings Ameren state that the programs have three purposes:

- To provide Ameren with "additional flexibility in providing reliable power and energy to its native load customers during periods of power supply constraints;"
- To provide "participating customers an opportunity to realize additional benefits from operation of customer-owned generation and/or load management activities when asked to do so by Ameren"; and
- To reduce "Ameren's incremental cost of power and energy."

Ameren's statements noted that customers might be asked to curtail load during periods other than at a time of system peak demand.

The programs are available to those customers with interval meters who agree to curtail an average of 1,000 kWhs per hour during the specified curtailment period. The programs are also available to multi-premises or multi-metered customers who agree to accept notification at a single location and also agree to curtail an average of 500 kWhs per hour at three or more premises or meter locations.

Potential participants must demonstrate to Ameren their ability to comply with the provisions of the experimental program. The statement filed by Ameren indicates that the Companies will use their "sole discretion" in determining which customers may participant in the programs. Customers are not required to participate in each curtailment called by Ameren, but could be terminated from the program should they repeatedly decline to curtail load when asked to do so.

Notification to customers of curtailment periods will occur either by 8:00 a.m. on the day prior to, or the morning of, the curtailment. Customers will be advised of the duration of the curtailment and the price per kWh customers will paid for the curtailment. Customers who intend to participate in a curtailment must indicate their desire to participate by 10:00 a.m. of the day the notification was given.

The statements indicated that customers will not receive a demand credit for participation. AmerenCIPS's statement indicates that participating customers may also be subject to a monthly "Meter Translation Charge" and will be charged an "Administrative Charge" for each curtailment. However, Ameren later made the decision to implement the program without applying the Administrative Charge."

2. Program Participation, Progress and Effects

No curtailments were called during 1999-2001.

Table 3: Voluntary Curtailment Billing Experiment

VOLUNTARY CURTAILMENT BILLING EXPERIMENT (AMERENCIPS AND AMERENUE)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
The AmerenCIPS billing program began March 19, 1999. The AmerenUE billing program began May 17, 1999.	To assist AmerenCIPS and AmerenUE in providing power and energy during periods of power supply constraints.	AmerenCIPS: Customers who can curtail demand by 1 MW at a single site or 500 kW at 3 or more sites. AmerenUE: Customers who can curtail demand by 1 MW at a single site Customers receive a credit for each kWh curtailed.	No curtailments called during 1999-2001.

IV. Section 16-106 Programs Offered by ComEd During 2001

This Section of the Report provides information about the seven ComEd experimental programs that were in effect during 2001.

A. Consolidated Billing Experiment

1. Program Summary

On December 30, 1997, shortly after the Customer Choice Law became effective, ComEd submitted a notice to the Commission describing the Company's implementation of the Consolidated Billing Experiment. The Consolidated Billing Experiment is effectively a continuation, under Section 16-106, of a Commission-approved program implemented by ComEd in 1996 called Rider CB that was terminated upon the inception of the Consolidated Billing Experiment. The customers who were taking service under Rider CB transferred to service under the Consolidated Billing Experiment.

ComEd stated in its 1997 filed statement that the program is designed to assist ComEd in developing systems and technologies that will allow for measuring and billing aggregated loads. An additional purpose is to gain experience with Automatic Meter Reading ("AMR") technologies. According to the filing, ComEd believes that these technologies would benefit customers in three ways: First, by facilitating the distribution of power and energy sold to customers by alternative suppliers; second, by allowing ComEd to "treat a customer with many geographically dispersed locations as a single customer"; and, finally, through the ancillary benefit of encouraging improved energy management by participating customers. ComEd anticipated that, through the design of the rates for service, customers would reduce their electric bills by decreasing their demand on ComEd's system during peak demand periods.

As noted above, the experimental program was offered to the same customers who were eligible for Rider CB. Customers eligible for the Consolidated Billing Experiment were two customer subclasses within the commercial customer class. Specifically, eligible customers included businesses in retail trade that had at least five premises and a demand of at least 25 kilowatts ("kW"), with a total load of 10 megawatts ("MW") to be served under the program. School districts with at least three premises that had at least 25 kW of demand with a total load of at least 3 MW that would be served under the program were also eligible. Participation in the experiment was voluntary.

ComEd anticipated that participating customers would save about 5% on their electric costs. Originally, a customer's bill was based on two demand charges. One of the demand charges was based on the number of kilowatts supplied at each of the customer's premises at the time of the highest coincident demand at all of the customer's premises. The other demand charge was based on the maximum demand at each of the customer's premises.

On December 30, 1999, ComEd revised its Consolidated Billing Experiment by filing a statement with the Commission describing the revisions to the program. In the filing, ComEd noted that many customers participating in the original experiment had used the knowledge gained from aggregating their load under the experiment to shop for and purchase energy as a group. ComEd also stated that it anticipated that, by the end of the first quarter of 2000, most customers participating in the experiment would have switched to delivery services. Therefore, ComEd decided to close the experiment to new customers and to terminate the experiment for existing participants as of June 30, 2001.

In the filing, ComEd also revised the method for calculating the demand charges. With the few remaining participants, the cost to provide coincident demand billing in the manner set out in the original experiment could no longer be justified. Therefore, the company decided to use a Coincident Demand Charge based upon each participant's billing history. The Maximum Demand Charge was calculated as set out in the original experiment.

2. Program Progress, Participation and Effects

The results of this program indicate that the program was well received by both groups of eligible customers. Retail trade establishments had a higher participation rate than the school districts.

In its "Report to the Commission" filed August 3, 1999, ComEd stated that the primary reason that motivated customers to participate in the program was to save money on their electric bills. A secondary reason was for the convenience of receiving a single bill that consolidates the bills for each of the customers' individual premises.

ComEd also stated that few participating customers have attempted to reduce their coincident demands, which could have generated additional customer savings. This finding indicated that many customers do not make the effort required by consolidated billing programs to realize the maximum achievable savings on their electric bills when given an opportunity to do so.

The majority of the problems encountered and costs incurred by participating customers were associated with the installation and servicing of telephones needed for the AMR meters used in the program. ComEd stated that labor and material costs for the installation of landline telephones ranged from $150 to $400 per meter, although customers were permitted to use cellular telephones. Customers that used a landline-based telephone were also subject to charges assessed by the local telephone company of about $15 per month per landline installation. Additionally, customers were required to rent an AMR meter, at cost of $20.05 or $39.05, depending on whether the customer has a landline-based or cellular-based telephone installation.

In its assessment of the program, ComEd stated that, while participation was high, and customers were saving about 5% to 7.5% on their electric bills, it found that some customers have had "difficulties" with the experiment, particularly with the installation and cost of the landline telephones that are used with the AMR equipment. For its part, ComEd stated that it gained expertise with the integration of metering, communications, and billing technologies used in the experiment. ComEd also obtained hourly load data from premises of varying sizes that it might not have otherwise collected. ComEd also stated that its experience with the Consolidated Billing Experiment has assisted in the implementation of open access in Illinois.

In its August 1999 filling, ComEd reported that it encountered problems related to meter installation and meter reading, as well as data transfer and processing problems in the billing systems used in the experiment. This resulted in some participants experiencing delays in receiving their electric bills. The implementation of ComEd's new billing system has also resulted in new billing problems. However, ComEd believes that these problems were eliminated with the December 30, 1999 filing.

ComEd's December 1999 filing also provided additional information about the progress of the program. In its filing, ComEd stated that the experimental program was largely successful in meeting its objectives of obtaining information about the systems and technologies used in aggregating (for billing purposes) the demand and energy usage of geographically dispersed customers. ComEd's filing also stated that it anticipated that participating customers would become more knowledgeable about purchasing energy as a group. ComEd believes that that objective was also met.

ComEd provided information to the Commission indicating that it believes that participating customers have benefited from the program by saving money on electric costs and also by receiving a single bill for multiple premises.

ComEd stated that there have been no adverse effects on reliability due to the program.

ComEd reported to the Commission that most of the Consolidated Billing program customers have chosen to end their participation in the program prior to the experiment's termination to become delivery services customers.

Since, customers participating in the Consolidated Billing Experiment have received discounts on their electric bills of approximately $35.0 million. ComEd has also incurred additional administrative and metering costs of approximately $3.2 million.

In 1996, the Commission undertook an investigation of the Rider CB program after it had been in effect for a few months. In the course of its investigation, the Commission posed several questions to ComEd, among which were questions relating to whether

Rider CB is an "experiment" and whether Rider CB would elicit information of value to ComEd and to future open access customers. After hearing evidence from several parties about these questions, the Commission found that ComEd's responses to the questions were satisfactory. In particular, the Commission found that "Rider CB is a lawful experimental billing program."[5]

As a result of the discounts provided to participating customers, the transition charges that participating customers who become delivery services customers are paying are lower than the transition charges that non-participating customers who have switched suppliers are paying. The difference in transition charge payments paid by participating customers and non-participating customers is equal to the amount of the discount program customers have obtained through their participation in the experimental program. Even though the program ended on June 30, 2001, program participants will still receive a discount on their electric bills for several years that probably will not be obtained by non-participants.

Table 4: Consolidated Billing Experiment

CONSOLIDATED BILLING EXPERIMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
The billing experiment began 12/30/97 and terminated on 6/30/01. The experiment was formerly known as Rider CB.	Experiment with the billing and metering systems for customers under common ownership.	Businesses in retail trade with at least five premises and 25 kW demand, with a total demand of 10 MW and school districts with at least three premises and 25 kW of demand, with a total demand of at least 3 MW. Participants were expected to save about 5% on electric bills.	Participation during 2001 from 181 multi-site retail trade premises and 204 school district sites. Customer bill savings average about 5% to 7.5%. Customer savings of $37.0 million through 2001.

B. Student Power 2000 Pricing Experiment

1. Program Summary

The Student Power 2000 Pricing Experiment was available to the estimated 4,300 public and private schools in ComEd's services territory that offer courses for grade levels kindergarten through the twelfth grade.

[5] Commission Order, Docket 96-0485, p. 34.

Schools with grade levels kindergarten through the fifth grade conducted annual energy projects with their students. The students at schools with grade levels sixth through twelfth grade performed annual energy audits. With the assistance of teachers, the students at these higher-grade levels developed energy plans to identify energy efficiency measures at their schools.

ComEd established a ten-member Advisory Board that provided ComEd with insight as to how to teach students about energy consumption. The Advisory Board also gave ComEd feedback concerning how schools value and approach energy efficiency measures.

Schools participating in the Student Power 2000 Pricing Experiment received a discount of 10% on their electric bills.

The Student Power 2000 Pricing Experiment was offered by ComEd for an initial three-year term. The program was implemented on January 30, 1998, and, pursuant to its terms, terminated in 2001.

2. Program Progress, Participation and Effects

Implementation of the program began with the commencement of the 1998-99 school year. More than 1,500 schools participated in the program; 727 schools were still participating when the program terminated in early 2001. The drop in participation was mainly due to the availability of delivery services, although some school districts lost their eligibility for the program by not complying with reporting requirements.

ComEd initially encountered difficulty in "identifying, contacting, and developing relationships with eligible customers and participants" due to the large number of school districts and individual schools that are participating in the program. However, over the life of the program, ComEd developed a participant database that enabled ComEd to record and maintain participant data.

ComEd apparently has not measured whether the participating schools' usage decreased as a result of their participation in the program. ComEd believes, however, that some schools have adopted energy efficiency measures as a result of the audits that students conducted as part of the program.

ComEd believes that the schools found the programs to be worthwhile for reasons other than the cost savings that schools obtained for the participation in the program. ComEd reported that approximately 90,000 students at 1,500 schools have participated in the Experiment, and that the students have gained an appreciation as to how energy can be used efficiently. Teachers used lesson plans developed by ComEd that teaches students about energy use.

Table 5: Student Power 2000 Pricing Experiment

STUDENT POWER 2000 PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Final Program Results**
Pricing program began 1/30/98, and had a three-year duration.	To educate students regarding energy efficiency, to develop practical energy plans for their schools, and to gain an understanding of schools' ability to implement energy efficiency improvements.	School districts were eligible. Participants were expected to save about 10% on their electric bills.	Over 1,500 schools participated in the program. Schools received discounts totaling $14.3 million since inception of the program. ComEd had additional costs of about $0.4 million during the life of the program.

C. Wind and Photovoltaic Generation Pricing Experiment

1. Program Summary

ComEd filed this experimental program on February 7, 2000. The purpose of the "Wind and Photovoltaic Generation Pricing Experiment" was to provide an incentive to retail customers to invest in wind and photovoltaic generation sources.

ComEd's filing stated that several of its experimental programs are designed to enhance system reliability. Unlike its previous reliability-related programs, which focused on the use of demand-side resources to enhance reliability, the Wind and Photovoltaic Generation Pricing Experiment program used supply-side measures to advance the same goal.

Wind and photovoltaic power systems are examples of "distributed resources," a term that includes, among other things, customer self-generation at the distribution level. ComEd stated that distributed resources could enhance reliability by freeing transmission line capacity and distribution line capacity to serve reliability purposes. According to ComEd, distributed resources may also have other benefits. For example, distributed resources could benefit a utility's system to the extent the resources are able to provide a substitute for investment in a utility's transmission and distribution system. Distributed resources could also benefit customers individually if the resources are located on a customer's site. With this experiment, ComEd intended to determine whether small wind and photovoltaic power systems are capable of enhancing system reliability.

In addition to benefits related to system reliability, ComEd stated that the program could benefit customers and vendors by providing experience with ComEd's "Interconnection Guidelines for Photovoltaic Systems." Additionally, the program would permit ComEd to gain experience with the metering and billing systems that are needed to support expansion of the wind distributed generation market. As an additional benefit, the program could encourage private investment in wind and photovoltaic energy sources. According to ComEd, such investment would stimulate economic growth, diversify Illinois energy resources' mix and also protect the environment.

The program was available to retail customers who own and operate wind and photovoltaic generators located on the customer's premises, provided that the generators are less than 40 kW in size. ComEd estimated that about 35 to 40 customers own and operate the wind and photovoltaic equipment needed to participant in the program. Total participation in the program was limited to 0.1% of the total load supplied by ComEd during the previous year. Thus, total participation was limited to approximately 200 MW. The participants were selected by ComEd to ensure the safety and reliable operation of the Company's distribution system. Each generator had to be capable of being classified as a "Qualifying Facility," as that term is defined in 83 Illinois Administrative Code Part 430.

A single meter with dual channels was used to measure the amount of power generated by the customer and supplied to ComEd and the amount of power delivered by ComEd to the customer. Participants were not be obligated to pay for this meter.

The rate that customers paid for the electricity supplied by ComEd was based on the same rates applicable to customers of similar end-use characteristics. The rate ComEd paid for the power generated by the customers was the rate specified in ComEd's Rider 4 (approximately one to two cents per kWh). ComEd also offered an "annual participation incentive" to customers as an inducement to participate in the program. This payment was equal to the difference between the customer's average retail rate (exclusive of the customer's monthly customer charge and certain taxes and other fees) les the price paid by ComEd for power generated by the customer. Effectively, then, participating customers received credit for the power they generated and sold to ComEd in the amount equal to the customer's retail rate, rather than the much lower rate specified in Rider 4.

ComEd's statement noted that customers could apply to the Department of Commerce and Community Affairs for a grant or rebate under the "Renewable Energy Resources Program" to help pay for the wind or photovoltaic generator.

2. Program Participation, Progress and Effects

ComEd noted that it expended significant amount of effort to make information about the program available to potential customers. ComEd included bill inserts in customer bills describing the program, issued press releases and established a hotline that customers could call to obtain information about the experiment. ComEd also enlisted the aid of organizations such as the Environmental Law and Policy Center, the Illinois Solar Energy Association and the Illinois Renewable Energy Association to promote the experiment.

ComEd installed automatic meter reading equipment at customer locations capable of recording the amount of electricity customers were supplying to ComEd from their generators. The meters were also capable of recording the time at which electricity is supplied to ComEd. These meters communicated with ComEd electronically.

ComEd stated that its technical and billing and credit personnel addressed issues related to the experiment.

Nine customers signed agreements and participated in the program during 2000 and ten additional customers participated in the program during 2001. Another customer signed an agreement in 2002 to participate in the program.

The 19 participating customers have sold ComEd a total of 13,835 kWh and received payments from ComEd totaling $662.17 for the electricity supplied. By the end of 2001, ComEd had 55.86 kW enrolled in the program. Of this total, 10 kW was attributable to wind-powered generation.

Costs incurred by ComEd in administering the program include the costs to promote the program (which ComEd notes are part of ComEd's expenditures relating to the promotion of renewable energy), administrative costs, and costs that were incurred in connection with the installation of the automatic meter reading equipment. As noted above, ComEd provided the meters used in the program.

In its preliminary assessment of the program, ComEd noted that the program's currently small size does not make it possible to determine whether these resources could have a significant impact on reliability. ComEd also noted, however, that despite the program's small size, ComEd has gained experience with the metering and billing systems that support the distributed resources market. With respect to the program's participation rate, ComEd stated that it observed that some customers who operate wind-powered and photovoltaic equipment did not have excess energy to supply to ComEd, and therefore did not participate in the program. Other customers operated generating equipment with capacities greater than 40 kW. These customers were therefore ineligible for the program.

Table 6: Wind and Photovoltaic Generation Pricing Experiment

WIND AND PHOTOVOLTAIC GENERATION PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Pricing program was filed 2/7/2000. Program terminated in 2002.	To determine whether small wind and photovoltaic power systems can provide reliability-enhancing measures.	ComEd retail customers who own and operate small (up to 40 kW) wind or photovoltaic generators located on the customer's premises.	Nineteen customers have participated in the program since its inception. Participation doubled between 2000 and 2001.

D. Dispatchable Back-up Generation and Reliability Pricing Experiment

1. Program Summary

On March 10, 2000, ComEd filed a statement with the Commission describing its intention to implement the "Dispatchable Back-up Generation and Reliability Pricing Experiment," a program that was designed to use customer-owned generation to reduce the stress on certain "distribution feeders." The program ended on May 1, 2002.

ComEd's filing stated that ComEd has identified a number of distribution feeders that tend to be stressed during peak periods. During such periods, ComEd would consider requesting the customers served by those feeders to reduce their loads. Eventually, rather than seek customer compliance with load reduction requests, ComEd would invest in distribution feeder upgrades. The objective of this program is to determine if those investments can be avoided or delayed by reliance on customer-owned generation.

ComEd's initial statement indicated that only customers owning generators that are capable of providing 200 kW of feeder relief would be eligible for the program. However, on June 12, 2000, ComEd filed a statement with the Commission indicating that it would eliminate that requirement (all other program provisions were unaltered).

As an incentive to participate, customers were offered payments that were based on the amount of investment ComEd would avoid by not upgrading the distribution feeders. Payments were only made for incremental investments in new capacity.

The following conditions applied to the program: Each participating customer must agree to operate its generator (or allow ComEd to start-up the generator, if the generator is controlled by ComEd) upon ComEd's request. Customers will be asked to start-up their generators no more than 15 times each year. The duration of each request will be between two and seven hours, up to a maximum of 75 hours per year. ComEd will provide a one-hour notice for intention to seek start-up of the customer-owned generation. A penalty of 50% of the incentive payment will be assessed in each instance of customer non-compliance with the start-up requests. Back-up generating facilities may be purchased from any supplier, but will be subject to ComEd's system protection requirements.

ComEd stated that it will gather data with respect to the program, and will provide a report to the Commission on the results.

2. Program Participation, Progress and Effects

To get the program underway, ComEd first identified the feeder systems that would require upgrade work to serve maximum levels of customer demand. A total of 22 feeders were included in the program. Next, the customers served by those feeders who had the capacity to operate their own generating equipment were identified. There were 94 customers who met this requirement, and others were added later when the 200 kW minimum size requirements were eliminated. ComEd then identified the amount of potential incentive to those customers, based on the costs that could be avoided if the customers installed generating equipment. ComEd made presentations to these customers and to companies involved in the sale of generating equipment.

A total of three customers elected to participate in the program. Two customers installed new generating equipment, and the other customer increased the amount of its existing generating capacity. These three customers were paid approximately $184,000 in incentive payments for their participation. ComEd estimated that it deferred approximately $1.8 million in transmission and distribution work for one year as a result of the program (although a recent ComEd analysis shows that the deferred feeder work is no longer necessary because the transmission and distribution needs have now been met through another manner).

ComEd identified two primary reasons as the causes for the participation rate in the program. First, it noted, a limited number of customers were potentially eligible for the program, given the eligibility criteria. Second, ComEd found that the cost of installing or upgrading equipment was often higher than the costs that ComEd would avoid by not performing distribution upgrades. Nevertheless, ComEd believes that it has gained information concerning the impact of the incentive payments on customer decision-making with respect to the installation of generation capacity.

Table 7: Dispatchable Back-up Generation and Reliability Pricing Experiment

DISPATCHABLE BACK-UP GENERATION AND RELIABILITY PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
The pricing program was filed 3/10/2000. The program ended on May 1, 2002.	To determine whether investment in distribution facilities can be avoided or postponed by inducing customers to install back-up generation.	Customers with generators capable of providing of distribution feeder relief were eligible. Customers were paid a lump-sum amount for their investment in increased generator capacity. The payment amount was dependent on ComEd's avoided investment cost.	Three customers elected to participate in the program. ComEd paid a total of $185,000 in incentive payments to participating customers. ComEd also deferred $1.8 million in transmission and distribution work for one year as a result of the program.

E. High Density Electrical Load Commercial Installation Pricing Experiment

1. Program Summary

On January 26, 2001, ComEd offered a program that is available to nonresidential customers with potentially unusually high electrical load density requirements. This program is offered as an alternative to Rider 6, which is available to customers with nonstandard loads, such high-density loads. Customers proposing projects with electrical load requirements exceeding 20 Watts per square foot are eligible for the program.

Technological developments have led to the creation of businesses that, should the businesses be successful, would use electricity at a significantly higher rate than businesses housed in similarly sized structures. According to ComEd, these businesses, which are referred to as "internet hotels" and by similar names, may use 10 to 20 times more electricity per square foot than typical commercial buildings.

The nature of such business projects is that the project developers must estimate the businesses' electrical needs in advance. However, the projected electric requirements of such projects may not materialize, leaving unused (and potentially unpaid for) distribution facilities.

ComEd stated that it created this program to facilitate the installation of the facilities needed by high-density commercial commercials, while accounting for the risk that projected load may not be met. The program requires participating customers to pay a refundable installation charge to ComEd, which will install all required equipment. As the customer's electric load grows, ComEd will refund all or some of the customer's installation charges. ComEd stated that this procedure will put the customer in the position of deciding whether it wishes ComEd to proceed with facilities installation, without adding to the risk that ComEd might not be compensated if the customer's projected electric requirements failed to materialize.

Yearly refunds of the installation charges paid in advance by a participating customer will be calculated based on a refund mechanism described in the notice ComEd filed with the Commission. To receive a total refund of all installation charges the customer's electric load would have to reach the projected level within five years of the inception of the customer's participation. If the customer's load level has not reached 90% of the projected level within five years, ComEd would retain all remaining non-refunded charges.

ComEd stated that this program will help ComEd in gathering data concerning the actual electric load of high-density use facilities. ComEd also states that the program will help it assess customers' accuracy in projecting the customers' electric requirements.

The determination of the number of customers eligible for the program was at the discretion of ComEd, which retained the right to amend or terminate the program at any time.

2. Program Participation, Progress and Effects

Approximately 60 customers contacted ComEd regarding high density electrical load facilities. ComEd made presentations about the program to 30 of these customers. One customer signed an agreement with ComEd and paid its refundable installation charge in the form of a surety bond.

ComEd believes that the program met its objectives during the first year of the program, as the Company believes that developers have made more realistic load requirement estimates for their projects. ComEd also believes that the program has thus lessened the risk that ComEd and its customers will bear the cost for developers' overoptimistic estimates of the amount of electrical infrastructure capacity they will need to support their projects.

Table 8: High Density Electrical Load Commercial Installation Pricing Experiment

HIGH DENSITY ELECTRICAL LOAD COMMERCIAL INSTALLATION PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Pricing program started on January 26, 2001. No termination date stated in filing.	To assist ComEd in gathering data concerning the actual electric load of high-density use facilities and customers' accuracy in projecting load electric requirements.	Non-residential customers are eligible. ComEd will construct facilities for customers upon payment of an installation fee.	One customer is participating in the program. ComEd believes that developers have made more realistic estimates of their need for electrical infrastructure capacity.

F. Low Consumption Communication Network Device Billing and Pricing Experiment

1. Program Summary

On October 23, 2001, filed a statement with the Commission describing an experimental billing program designed for low-consumption customers taking unmetered service. The program is offered as an alternative to ComEd's otherwise applicable tariffs.

The growth of the wireless technology industry has led to the creation of service providers offering such services as Internet access, local area network and other services. The service providers often use radio transmission technology from low-consumption devices mounted on distribution service and streetlighting poles. While these devices use a negligible amount of electricity, the billing charges associated with service under standard tariffs could be quite significant if each device were treated as a separate account, creating a disincentive for service providers from enlarging the scope of their businesses.

ComEd's experimental program allows installation located within a municipality's boundaries aggregated on a single account for billing purposes. Charges include a fixed monthly charge per device that is based on the electrical consumption of each device. These charges range from $3.75 per month per device for devices with an energy consumption between 0 kWh and 25 kWh, to $8.25 per month per device for devices with an energy consumption between 75 kWh and 100 kWh. Only devices with a consumption level exceeding 100 kWh can be used in the program. An additional monthly customer charge of $5.50 is assessed for each account. Customers are also charged an unspecified initial account setup fee that is determined at the time of application. Customers may be also subject to for any fees incurred by ComEd to make any revisions to ComEd facilities that are necessary to accommodate installation or removal of the participant's devices.

In lieu of this program, a customer would be charged under ComEd's Rate 6 (General Service). Under Rate 6, each account would be charged a customer charge of $8.83 per month, plus a per kilowatt-hour energy charge and an additional charge per kilowatt-hour.

Participating customers must sign a form that details the initial account setup fees and the notification requirements related to the installation or removal of devices served under the experiment.

2. Program Participation, Progress and Effects

Only one customer participated in the program during 2001.[6] ComEd notes that the introduction of this program happened to coincide with a significant economic downturn in the telecommunication and wireless industries, which is likely the cause of the low participation rate. ComEd concluded that there appears to be no market need for this program.

ComEd did not incur any marketing or promotional costs in connection with the program, as program participants were required to pay ComEd for various costs incurred during program implementation. The one participating customer paid ComEd approximately $65,000 for ComEd's costs to modify ComEd's billing system to the participant's devices to be aggregated on a single account.

Table 9: Low Consumption Communication Network Device Billing and Pricing Experiment

LOW CONSUMPTION COMMUNICATION NETWORK DEVICE BILLING AND PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Billing and pricing program started on February 22, 2001 and ended in February 2002.	To determine whether it is appropriate for ComEd to offer a billing alternative to unmetered customers using communication network devices.	Customers with at least 25 communication devices of 140 watts or less and a monthly consumption of less than 100 kWh.	One customer participated in the program.

[6] This customer declared bankruptcy before any aggregation billing occurred.

G. Enhanced Distribution Billing and Pricing Experiment

1. Program Summary

On October 23, 2001, filed an experimental targeted at customers desiring a distribution reliability level that exceeds ComEd's standard level of distribution services. According to ComEd, customers interested in this program potentially include the following:

(i) High density load customer groups, including "internet hotels";
(ii) Manufacturers with sensitive continuous manufacturing processes;
(iii) Building owners and campus-type facilities tenants needing to install back-up power sources to comply with building codes and regulatory requirements; and,
(iv) Governmental buildings that need back-up power.

ComEd's bundled service customers and delivery services customers purchasing power from a Retail Electric Supplier are eligible for the program. Customers must demonstrate either a need for the services or need to install emergency back-up power in order to meet legal requirements.

Services provided under the program include "power condition services" such as power factor correction and voltage support. The equipment that might be installed to provide these services includes relaying, metering, and generation equipment for power conditioning and voltage support designed to ensure the uninterrupted flow of energy. Any generation equipment installed as part of the program will interconnected with ComEd's distribution system and will be installed ComEd side of the customer's meter. ComEd will operate and maintain such equipment, except to the extent that the equipment is provided under the "Retail Electric Supplier" interconnection option.

All equipment interconnected to the distribution system must meet the requirements of ComEd's general interconnection policy and "any other environmental or regulatory requirements specific to the Program" must be complied with. Generation facilities that supply power and energy to the grid must comply with interconnection requirements applicable to independent power producers that are included in ComEd's Open Access Transition Tariff on file with the Federal Energy Regulatory Commission and with all appropriate state and federal regulatory requirements.

Customer charges are individually negotiated and are priced and accounted for as competitive services. Program participants are also subject to charges normally incurred under ComEd's applicable tariffs. Participating delivery services are subject to charges specified in ComEd's delivery services tariffs, including transition charges.

Retail Electric Suppliers may install, operate and maintain generation equipment for their customers provided that they meet with ComEd's interconnection standards and the equipment is only used for the experimental program. ComEd may also require

Retail Electric Suppliers to install or pay for any equipment ComEd needs to ensure safety to prevent interference with service to non-participating customers.

ComEd states that the total of all generation equipment installed by ComEd and by any individual Retail Electric Supplier shall not exceed 10 MW. The total amount of generation that can be interconnected under the program shall not exceed 30 MW.

In its October 23, 2001 filing, ComEd stated that it will gather data to determine the customer demand and willingness to pay for the services offered under the program. ComEd will also evaluate the potential for expanding the use of this type of installation for curtailment purposes or to increase the supply of energy to the grid.

ComEd also stated that it would provide an annual report to the Commission describing its experience with the program. ComEd terminated the program following the Commission's adoption of 83 Ill. Adm. Code Part 452.

2. Program Participation, Progress and Effects

ComEd identified 29 potential participants for the pilot program. ComEd made initial presentations about the program to 18 of these customers, and completed second meetings with 8 customers. However, none of the customers ultimately signed up for the program during 2001. ComEd believes that the relatively low interest level in the program may be related to the recent economic downtown in the telecommunication industry.

Table 10: Enhanced Distribution Billing and Pricing Experiment

ENHANCED DISTRIBUTION BILLING AND PRICING (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Billing and pricing program filed on October 23, 2001. No termination date was specified in filing.	To allow ComEd to test, monitor and evaluate alternative options for customers seeking a level of reliability that exceeds ComEd standard level of distribution service.	Customers with a specialized need for services offered under the program and customers with a need to install emergency back-up power to meet local code requirements.	ComEd identified potential 29 customers as potential participants. No customer participated in the program during 2001.

H. 2001 Load Curtailment Pricing Experiment

1. Program Summary

On January 25, 2001, ComEd filed a statement with the Commission describing its plans to offer a successor to its load curtailment programs that were in operation during prior years. The 2001 program is similar to, but expands the scope of, the load curtailment program filed in 2000. According to ComEd's statement, the 2001 program expands the scope of the program in effect in 2000 by increasing the number of customers eligible for the program and by adding more choices for customers concerning their level and frequency of voluntary curtailment participation.

ComEd's statements indicated that the experimental program was intended to operate within the context of electric restructuring (Illinois electric markets opened to all non-residential electric customers in January 2001). The statements also indicated that the purpose of the program was to test the willingness of ComEd's power and energy customers to provide curtailment in exchange for market-based compensation.

ComEd described the program as an effort to determine whether customers could voluntarily provide "curtailment in sufficient quantity and duration to aid in system operations," including relieving constraints in the operation of its transmission and distribution systems. Additionally, ComEd noted that it might call curtailments to obtain "more economic system operation." In previous years, ComEd's filings had noted the program potential to reduce peak generation, which could reduce emissions of carbon dioxide and nitrous oxide.

ComEd's filing stated that the experimental purpose of the program is to test whether customers would voluntarily agree to curtail their electric usage in exchange for a market-based payment. The program would also test the relationship between varying price signals and the amount of curtailment that customers might provide.

The 2001 Load Curtailment Pricing Experiment was available to non-residential customers only. The program includes provisions for customers receiving bundled service from ComEd as well as for customers taking delivery services.[7] Customers within ComEd's control area who are not retail customers are also eligible.[8]

Customers eligible for this curtailment option had to able to provide a minimum curtailment level of at least 5% of their maximum peak demand or 10 kW, whichever is greater. June to September 2001 was identified as the period during which curtailments might be called. Any curtailment called by ComEd would last no less than two hours and no longer than seven hours. ComEd stated in its filing that it anticipated providing at least one hour's notice of any curtailment event.

ComEd's statement noted that it retained the right to determine the number of customers eligible to participate in the program.

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7 Delivery services customers are those customers who have switched to a "Retail Electric Supplier" ("RES"), or are taking service under the Section 16-110 Power Purchase Option ("PPO").

8 For example, the program is available to customers in the communities of Batavia, Naperville and St. Charles.

Two options were available customers, the "Energy Based Option," available to bundled customers, and the "Capacity Based Option," available to Power Purchase Option ("PPO") customers.

a) Energy Based Option

Under the "Voluntary Load Reduction Maximum Value Program" (called "Energy Based Option #1 in ComEd's filing), participating customers were subject to curtailment up to 20 times per curtailment season, up to a maximum of 100 hours per year. Participating customers received a minimum of $0.25 per kWh reduced during curtailment periods, provided that the curtailment amount achieved was no less than 5% of the customer's peak demand, or 10 kW, whichever is greater. ComEd may use its discretion to offer more than $0.25 per kWh. Customers would be paid a performance bonus of $5 per kW of the committed curtailment level by curtailing more than their committed curtailment level. In the event no curtailments are called, customers would be paid a bonus of $5 for each kW that they would commit to curtail.

Under the "Voluntary Load Reduction Program ("Option #2"), participating customers were subject to curtailment up to 15 times per curtailment season, up to a maximum of 75 hours per year. Participating customers received a minimum of $1.00 per kWh reduced during curtailment periods, provided that the curtailment amount achieved was no less than 5% of the customer's peak demand, or 10 kW, whichever is greater. ComEd may use its discretion to offer more than $1.00 per kWh. Customers would be paid a performance bonus of $3 per kW of the committed curtailment level by curtailing more than their committed curtailment level. In the event no curtailments are called, customers would be paid a bonus of $3 for each kW that they would commit to curtail.

ComEd's statement noted that customers with demand in excess of 1,000 kW might be entitled to individual load reduction agreements that specify load reduction payments that are greater than the payments applicable to smaller-use customers.

ComEd noted that it would use its discretion to determine whether payments in excess of the minimum would be offered. No penalties were to be assessed for a customer's failure to respond to a curtailment request.

The amount of each customer's load curtailment response would be calculated by comparing a customer's typical daily use absent the curtailment with the customer's actual usage. Payments for curtailments were due to be credited to customers by December 31, 2001.

b) Capacity Based Option

Only PPO customers were eligible for the Capacity Based Option, under a program ComEd called the "Planned Performance Load Reduction Program." To be eligible for this option, customers had to capable of providing a minimum of 5% of the participant's maximum peak load, or 100 kW, whichever was greater. Customers could be called up to 15 times per season, or a total of 75 hours.

Customers were paid at a rate of $35 per kW per season for the average number of kW reduced during curtailment periods. Customers providing "extended curtailments" exceeding seven hours duration were paid at the rate specified in the Energy Based Option program. No penalties were assessed for a failure to comply with ComEd's requests to curtail load.

2. Program Participation, Progress and Effects

ComEd determined that about 8,500 customers were eligible for the various options associated with the Energy Based Option program.

ComEd had a program in effect during 1999-2000 that was similar to the Energy Based Option, so a comparison can be made with respect to the level of participation in this aspect of the program. Approximately 1,100 more customers participated in the 2000 version of the load curtailment program than participated in the program during 1999. More than 800 new customers participated in the program during 2001. ComEd attributes the increase in participation to ComEd's efforts to inform customers about the program, as well as positive customer feedback from customers already participating in the program.

ComEd received total customer curtailment commitments from 3,400 customers interested in participating in the Voluntary Load Reduction Program, resulting in approximately 509 MW available for curtailment.

The Voluntary Load Reduction Maximum Value Program received participation from 52 customers, representing 32 MW in load available for curtailment. This program was not offered in previous years. The 18 participants in the Early Advantage Program resulted in 85 MW in load available for curtailment. The number of customers participating and the number of MW available for curtailment in the Early Advantage Program were increases from 2000.

Similarly, the number of customers participating in the Capacity Based Option increased between 2000 and 2001, as 267 customers, representing 182 MW, participating in the Capacity Based Option during 2001.

ComEd did not call a system-wide curtailment in 2001. Nevertheless, ComEd believes that customers participation in the program indicate a widespread customer interest in market-based load curtailment programs.

Table 11: 2001 Load Curtailment Pricing Experiment

2001 LOAD CURTAILMENT PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Pricing program in operation during Summer 2001.	To determine whether voluntary approach to curtailment can aid in system operations.	Bundled service and delivery services customers who committed to curtail load when requested. Program also available to PPO customers. Customers receive payments during curtailment periods.[9]	A total of 3,777 customers committed to curtail 809 MW, substantial increases from previous years. No general curtailments were called. ComEd paid approximately $4.4 million in incentive payments to program participants.

I. Reliability and Restoration Pricing Experiment

1. Program Summary

On May 30, 2000, ComEd filed a statement with the Commission announcing its intention to offer the "Reliability and Restoration Pledge Pricing Experiment for Electric Service." The program began on June 1, 2000, and ended on December 31, 2001. ComEd stated that the program was part of its "Reliability Improvement Plan." Under this program, customers experiencing lengthy or numerous service interruptions could be compensated by ComEd.

ComEd's statement noted that one purpose of the program would be to gather data on the "impact of fixed value performance guarantees on customer satisfaction." The statement cited other experimental purposes related to ComEd's intention to improve the reliability and quality of its electric service.

All ComEd customers were eligible for the program (except for certain unmetered and street and highway lighting customers). A residential customer would receive a $60 check and non-residential customers would be issued a $100 billing credit if either of the following circumstances occurred: (i) its service were interrupted for more than eight consecutive hours; or (ii) it experienced three outages, each lasting more than four or more consecutive hours in any sixty-day period. However, certain service interruptions that occurred during and were caused by severe weather, or that were caused by the customer, would not be compensated. Additionally, customers whose service was disconnected for safety or credit reasons were not eligible for compensation.

[9] See text for a description of the payments.

Customers did not need to call ComEd to receive payments. Payments were to be mailed within days after a service interruption occurred that was covered by the program.

ComEd provided inserts in customer bills describing the program. ComEd also provided training to its customer service representatives to enable company representatives to answer customer questions about the program. ComEd also devised computer programs to identify when customer payments were required.

2. Program Participation, Progress and Effects

In 2001, ComEd made payments totaling $1,135,260 to 17,735 customers as a result of service interruptions of the type covered by the program. Payments of $957,360 were made to residential customers and $177,900 was paid to non-residential customers. Payments were made to 17,291 customers based on the performance standard that called for payments for service interruptions that lasted more than eight hours. The performance standard that required payments to customers experiencing three outages of four or more continuous hours in a 60-day period resulted in payments to 444 customers.

ComEd also incurred administrative expenses of approximately $0.2 million during 2002 in connection with this program, an amount that is considerably less than the $2.4 million that ComEd spent on administrative expenses during 2000.

Table 12: Reliability and Restoration Pricing Experiment

RELIABILITY AND RESTORATION PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Pricing program started on June 1, 2000 and ended on December 31, 2001.	To gather data about the effect of service interruption payments on customer satisfaction. Also, to study the use of standards that would not require customers to notify ComEd of service interruptions.	Residential customers received a $60 payment and non-residential customers received a billing credit of $100 when service interruption of specified duration occurred.	ComEd made payments of totaling $1,135,260 to 17,735 customers as a result of service interruptions. Payments were made to 17,291 customers as compensation for eight hours of continuous service interruptions. ComEd made payments to 444 customers who experienced three lengthy outages in a 60-day period.

V. Section 16-106 Programs Operated by Illinois Power Company During 2001

1. Program Summary

On June 8, 2000, Illinois Power Company filed a statement describing its intention to offer a load curtailment program to its commercial and industrial customers. The pricing experiment was initiated in response to heightened awareness about reliability and commodity market pricing during peak pricing periods. In response to the Illinois Attorney General and the Federal Energy Regulatory Commission, the program will emphasize demand side management. The purpose of the program is test the belief that customers would voluntarily curtail their load requirements prior to receiving a directive from Illinois Power to curtail their load.

Customers taking service under interruptible, recallable, curtailable tariffs are not eligible for the program. Illinois Power's firm PPO customers, and delivery services customers taking service from Retail Electric Suppliers are also eligible. Customers must have metering capable of providing interval usage data. The number of customers eligible to receive service would be at the discretion of Illinois Power, and would be based on various technical and economic criteria.

Participating customers would be notified by telephone, fax or e-mail one day prior to a curtailment. Curtailments could also be called with less notice, should conditions arise. Customers will be notified also of the price Illinois Power would pay for the curtailed energy. Customers are not obligated to participate on a given day. There were no minimum load reduction requirements.

Curtailed energy would be calculated as the difference between actual energy consumed during the requested period and the amount of energy participating customers would normally be expected to use during the same period. Customers would be compensated by check soon after each voluntary curtailment.

The program will terminate by December 31, 2004.

2. Program Participation, Progress and Effects

No voluntary curtailments were called during 2000 or 2001.

Table 13: Load Reduction Pricing Experiment

LOAD REDUCTION PRICING EXPERIMENT (ILLINOIS POWER)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**

Pricing program began June 2000. The program is scheduled to terminate by 2005.	To measure non-residential customers' response to voluntarily curtail their load requirements in return for kWh-based payments.	Non-residential customers, with the exception of customers already taking service under existing curtailment programs or taking non-firm PPO service.	No curtailments were called during 2000 or 2001.

VI. Conclusion

This Report has examined the experimental programs administered by AmerenCIPS, AmerenUE, ComEd, and Illinois Power, the Illinois electric utilities operating programs during 2001 under Section 16-106 of the Act. Ten programs were in operation during 2001. However, the number of Section 16-106 experimental programs will decrease in the future, as some of the programs have expired and probably will not be renewed. Additionally, Part 452 includes restrictions on the type of programs that electric utilities choosing to organize as Integrated Distribution Companies may offer under Section 16-106. ComEd announced this year that four of its experimental programs would terminate or become unavailable for participation by new customers due to the adoption of Part 452.

AmerenCIPS, AmerenUE, ComEd and Illinois Power have operated load curtailment programs. However, none of the utilities called general curtailments during 2001-2002.

AmerenUE implemented a program to gauge low-income customers' reaction to a new bill payment option (the Pay As You Go Program). This program began in 1999 and terminated in 2001.

The experimental programs that have been operated by ComEd since 1997 can be grouped into two general categories. One type of program concerns programs targeted at selected customer groups. Several hundred customers have participated in the three programs of this type that ComEd has operated. Only one of these programs was still effective in 2001. ComEd has also operated programs that are designed to enhance the reliability of ComEd's electric service. Several of these programs were in operation during 2001.

Expenditures on ComEd's Section 16-106 programs have been substantial, as its total expenditures during 1997-2001 on these programs now exceed the $130 million mark. This figure does not take into account the amount of transition charge revenue that ComEd has lost, and will lose in the future, as a result of giving discounts to Section 16-106 program participants who subsequently become delivery services customers. ComEd's level of expenditures on its experimental programs by other utilities that have operated programs have been more modest. For example, AmerenUE's expenditures on its Pay As You Go Program have not exceeded $250,000.

In the following section, the Commission presents comments about issues related to the programs operated by electric utilities during 2001.

A. Effect on the Electric Rates of Non-participants

Each of the programs under Section 16-106 has offered rate discounts or other inducements to the customers participating in the program. For most of the larger-scale programs, the discounts have ranged from about 5% to 15%. These discounts likely will not have an impact on the future electric rates by customers not participating in the programs because of the provisions in the Act that allow the Commission, when it sets base electric rates, to exclude the expenditures on experimental programs undertaken pursuant to Section 16-106.[10]

B. Costs and Benefits of the Experimental Programs

The offering of rate discounts or participation incentives gives rise to the question of whether the rate discounts or incentives are commensurate with the expected benefits of the programs; that is, whether the inducements offered to eligible customers are such that the inducements encouraged maximum participation while minimizing costs.

1. Programs Related to Reliability

The Commission has no reason to believe that the payments associated with ComEd's primary load curtailment program (the "2001 Load Curtailment Pricing Experiment"), were high in comparison to the expected benefits related to the preservation of system reliability. Similarly, the benefits of ComEd's program to defer maintenance on certain parts of its transmission and distribution system by encouraging customers to install their own generation seemed to at least match the costs of the program.

It would be difficult to determine any benefits that ComEd has realized as a result of its program to compensate customers for service interruptions, other than perhaps increased customer satisfaction among the customers receiving compensation. The wind and photovoltaic generating experimental program is currently of a very small size, and has had only a negligible effect on system reliability. Since the major purpose of this experiment is to benefit system reliability, the costs spent on this program may not yet be worth the benefits that have been achieved by the program. Likewise, ComEd operated has operated other small-scale programs related to enhancing reliability that have attracted very little participation. Although the benefits of the programs were minor, ComEd's costs were equally small.

[10] See Section 16-111(d) of the Act.

2. Consolidated Billing and Student Power 2000 Pricing Experiments

ComEd expended a considerable amount of money, primarily in the form of discounted rates, to induce customers to participate in the Consolidated Billing programs. The principal benefit to ComEd appears to be the experience it gained with the systems associated with aggregating customers for billing and report purposes. It seems possible that this information could have been obtained at lesser costs via other means.

The rate discount provided to the hundreds school districts currently participating in the program is about 10%. In return for providing the discount, it appears that the only benefits that ComEd will receive is information that will be useful to ComEd when the school districts are eligible to purchase power from suppliers other than ComEd. The Commission, therefore, is doubtful that the costs associated with the Student Power 2000 Pricing Experiment were equal to the benefits achievable from the program.

C. Are the Section 16-106 Programs "Experiments?"

A question that arises when a utility implements an experimental program is whether the programs truly are "experimental," as that term is used in Section 16-106. Or, put another way, the question is whether the experiments initiated by Ameren, ComEd and Illinois Power were the type of programs contemplated by Section 16-106.

1. Programs Related to Reliability

ComEd's load curtailment program does not seem to be the type of program envisioned by Section 16-106. While the program serves a useful and important public purpose, the Commission believes that the program is "experimental" only in the very loose sense of the word. Rather than "experiment," as one would ordinarily use that term, the program was apparently implemented as a convenient means to help ComEd maintain a reliable amount of electric supply during peak usage periods. There are other means that ComEd could have used to implement this program that do not involve Section 16-106. For example, ComEd could have filed this program for Commission review, which would have also permitted an opportunity for any interested party to comment on the program. The same comments apply to the curtailment programs implemented by Ameren and Illinois Power.

It is difficult to imagine that the General Assembly anticipated that a utility would use Section 16-106, a section of the Law entitled "Billing Programs," to implement a program that tests the proposition that customers who receive compensation as a result of service outages would have a more favorable opinion of the utility.

On the other hand, ComEd's use of the Section 16-106 mechanism to implement a renewable energy program and other small-scale programs seems a proper use of Section 16-106. Even so, there are likely parties who would have appreciated an opportunity to comment on these programs before they were put into place.

2. Consolidated Billing and Student Power 2000 Pricing Experiments

In its investigation of Rider CB, the Commission found that the Rider CB program would provide useful information, even though the experimental procedure used in the program might not be the procedure typically used in scientific experiments. The Commission has the same conclusion about the successor program to Rider CB, the Consolidated Billing Experiment. It is difficult to discern the objective being tested Student Power 2000 Pricing Experiment.

3. Pay As You Go Program

The Commission believes that AmerenUE's Pay As You Go Program is the type of experimental program envisioned by Section 16-106. The program is designed to determine whether customers will remain with an experimental program for a sufficient amount of time to enable the customers to erase past debts with AmerenUE.

D. Effects on Competition

In determining whether there may be harmful effects on competition from an experimental program, one should consider the effect of the program on two markets. One market is the market in which the customers participating in the programs sell products. The second market is the electricity market in which program participants themselves are customers.

1. The Programs Related to Reliability

There should be negligible, if any, effects on competition from the implementation of the load curtailment programs. Had the programs resulted in ongoing rate discounts, there might also be concern about the long-term effects of such discounts on competition, but the programs have only offered short-term rate discounts. Moreover, the utilities have not called general curtailments over the last couple of years.

ComEd's program to encourage self-generation might be considered to be positive for electric competition (even though the program is presently of limited scale), since the program encourages participants to move away from ComEd's electric supply service. Likewise, the small-scale wind and photovoltaic program might also be considered to be beneficial to competition, for the same reason. The Reliability and Restoration Pricing Experiment should have a negligible effect on competition, even though it may result in some customers having a more favorable opinion of ComEd. Finally, the low-participation programs obviously will not have much impact on competition.

2. Consolidated Billing and Student Power 2000 Pricing Experiments

Customers participating in the Consolidated Billing Experiments were not prevented from switching to delivery services. However, these customers will be charged smaller transition charges than other similar customers who did not participate in the programs. These lower transition charges could give participating customers a small competitive advantage over non-participating customers.

The school districts participating in the Student Power 2000 Power Pricing Experiment do not compete against other school districts. However, the knowledge gained from the program may assist ComEd in retaining the school districts as customers when the school districts are eligible to choose new suppliers. On the other hand, the fact that ComEd has a marketing advantage over other suppliers will be unlikely to discourage suppliers from entering the Illinois electric market.

Appendix

Table 14: List of Section 16-106 Experimental Programs, 1997-2001

Name of Program	Program Dates	Electric Utility	Eligible Customers
Voluntary Curtailment Billing Experiment	3/19/99 - Present	AmerenCIPS	Nonresidential customers
Pay As You Go Billing Program	9/10/99 – 9/2001	AmerenUE	Low-income customers
Voluntary Curtailment Billing Experiment	5/17/99 - Present	AmerenUE	Nonresidential customers
Affinity Group Billing Experiment	12/31/97 – 12/31/2000	ComEd	IRMA members only
Consolidated Billing Experiment - Revised	12/31/99 – 6/30/2001	ComEd	Commercial customers
Dispatchable Back-Up Generation and Distribution Reliability Pricing Experiment	6/12/2000 – 5/1/2002	ComEd	Nonresidential customers
Enhanced Distribution Billing and Pricing Experiment	10/23/2001 – 2/1/2002	ComEd	Customers showing need for continuous service
High Density Electrical Load Commercial Installation Pricing Experiment	1/26/2001 – 2/1/2002	ComEd	High-density use customers
Load Curtailment and Generated Energy Procurement Pricing Experiment I	6/26/98 - 7/3/98	ComEd	Nonresidential customers
Load Curtailment and Generated Energy Procurement Pricing Experiment II	7/14/98 - 12/31/98	ComEd	Nonresidential customers
2000 Load Curtailment Pricing Experiment for Electric Service – Revised	5/4/2000 – 12/31/2000	ComEd	Nonresidential customers
Low Consumption Communication Network Device Billing and Pricing Experiment	2/22/2001 – 2/1/2002	ComEd	Customers with low-consumption communication devices

Table 14 (Continued): List of Section 16-106 Experimental Programs, 1997-2001

Name of Program	Program Dates	Electric Utility	Eligible Customers
Reliability and Restoration Pricing Experiment	5/30/2000 – 12/31/2000	ComEd	Customers whose service was interrupted
Student Power 2000 Pricing Experiment	1/30/98 – 12/31/2000	ComEd	Public and private grade K-12 schools
Wind and Photovoltaic Generation Pricing Experiment	2/7/2000 – 2/1/2002	ComEd	Customers owning a wind or photovoltaic generator
Load Reduction Pricing Experiment	6/8/2000 – 12/31/2004	Illinois Power	Nonresidential customers
Large Customer Conservation Pricing Experiment	7/24/98- 9/30/98	Illinois Power	Nonresidential customers
Small Customer Conservation Appreciation Pricing Experiment	7/22/98-98	Illinois Power	Small-use customers